

MODIS Technical Team Meeting
Thursday, October 31, 2002
Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Jack Xiong, Bill Barnes, Ed Masuoka, Eric Vermote, Robert Wolfe, Steve Kempfer, Shaida Johnston, Wayne Esaias, Chris Justice, Bob Barnes, and Bruce Guenther, with Yolanda Harvey taking the minutes.

1.0 Upcoming Events

- Pecora 15 & Land Satellite Information IV Symposium, November 12-15, 2002, Denver, Colorado (abstract deadline past)
<http://www.asprs.org/Pecora-ISPRS-2002/program.html>
- EOS Investigator Working Group Meeting, November 18-20, Ellicott City, Maryland
http://eospsa.gsfc.nasa.gov/eos_homepage/iwg2002.html
- IGARSS 2003, July 21-25, 2003, Toulouse, France (abstracts due by January 17, 2003)
<http://www.igarss03.com/>

2.0 Meeting Minutes

2.1 General Discussion

Salomonson reported that the next MODIS Science Team Meeting will likely happen in January of 2003, but no specific dates have been chosen. HQ (latest report) will issue the upcoming "recompete" RFP on November 15th, letters of intent will be due near mid-December, and proposals will be due in mid March.

Bob Barnes reported that the SIMBIOS program is doing comparisons of aerosols over oceans, and is examining data from MODIS, SeaWiFS, and Aeronet. He mentioned that they would be generating comparison scatter-plots as a start.

Salomonson reported that he is trying to organize an invited MODIS section at the next IGARSS. There will be room for 10 papers, and he said that we might consider including an instrument/calibration paper. The meeting will be in Toulouse, France, from July 21 – 25, 2003. Bill Barnes said that he and Jack Xiong are considering doing a major Aqua paper. Salomonson suggested also doing papers on MODIS calibration subsystems. Salomonson reported that he is making plans to go to the IWG, which will be in Ellicott City, Maryland. Several MODIS results will be presented there including one by Dorothy Hall on the use of snowcover data in models. Esaias reported that Dennis Clark, Mark Abbott, and Bob Evans will each present Oceans papers.

2.2 Instrument Status

Bill Barnes reported no problems with the instruments. He reported that there was an instance about a week ago, but it was an operator error. The problem has to do with orbital maneuvers, and Johnston added that the problem is procedural. Wolfe asked if this was the same as the earlier problem with lost commands, and Bill Barnes replied that this is a separate issue, and the lost commands problem was partially fixed. Masuoka said that the problem appears to be that the procedure used for Terra MODIS during maneuvers isn't exactly right for Aqua, so the procedure has been modified to keep it

from happening again. Johnston added that the two s/c are different, and the operators were expecting the same systems and responses. Bill Barnes reported that the instruments are otherwise doing very well.

On ephemeris data, Wolfe reported that he spoke to the FDS people about adding additional ephemeris to allow closer to leading-edge processing. The issue is with funding. Xiong reported that they don't have enough ephemeris data for Aqua MODIS lunar calibration. Masuoka wondered if it matters how close we process to leading edge, because there are other systems (Rapidfire and the Near-Real Time Processing System) that are even closer to real-time production. Wolfe reported that they are using predicted ephemeris data with very little degradation. Wolfe concluded that at this point, additional ephemeris data probably wouldn't help much, but that they should probably come back to the issue in about six months. Salomonson asked to be kept apprised of the situation, and indicated that he's willing to speak to others about the issue. Guenther asked whether this will have any impact on direct broadcast users, and Wolfe said no, usually predicted ephemeris data is good enough for DB users, otherwise they only have to wait 24 hours for actual ephemeris data.

2.2.1 Aqua MODIS

Wolfe reported that there is a problem with the yaw values from the Aqua spacecraft. They are seeing some deviations. There was a meeting with the Project and they think that they understand the problem. They noticed that if they post-process the data on the ground rather than using data from the spacecraft, they get very different answers. The impact on the products is that they initially won't be able to reach a 100-meter RMS error, but they should be able to fix the problem given some time.

2.2.2 Terra MODIS

No issues reported.

2.3 DAAC

Kempler reported a data versioning problem, but said that it will not impact reprocessing. There is also a data pool problem – some of the data in the pools was corrupted, so they've halted the data pool until the problem is solved. Masuoka reported that all of the DAACs seem to be having this problem. Kempler also reported that the current ECS contract is expired, and there are six months until the new contract comes onboard.

Kempler reported that the DAAC continues to work with Dr. J. Simpson and is responding to his queries. Dr. Simpson has pointed out a lot of interesting and useful issues, and because of that, the DAAC is fixing a lot of problems that probably improve experiences for many users, not just Dr. Simpson. If they fix a problem that affects just 5% of the user community, that's a big accomplishment. Kempler concluded that Dr. Simpson gives a lot of good feedback on interfaces. Salomonson added that we want to hear from our users about areas where improvements are needed for data access.

2.4 MODAPS

Masuoka reported that as soon as the data pools are fixed, MODAPS will start reprocessing Atmospheres. They've been holding off, and Masuoka wanted to know when they could go forward. Masuoka will hold a land products readiness review on December 2, 2002, to review any open issues with the products before the Collection 4 reprocessing begins. He doesn't want to start, then have people realize a month or so in

that there's a problem. Salomonson agreed. Vermote agreed, but expressed concern about the schedule. Masuoka replied that he will suggest an end date that hopefully everyone can live with. Wolfe said that the issue is having enough time to evaluate and sign off of the product, not with a meeting to express agreement. They have two weeks of leeway built into the schedule, but he wasn't sure that would be enough time. Masuoka said that they were able to obtain some extra leeway with the 11/29 date, which created a little extra time on the back end. He continued that it's important that people agree before going forward. Esaias said that Oceans went through this process, and what it boiled down to was making sure that the changes went in and were working correctly. Salomonson said that he wants to see this worked out.

Bill Barnes asked if Terra L1B data is currently being reprocessed at the GES DAAC, and Masuoka said yes, they have received several days of data already.

On the issue of the MODIS model location, Masuoka reported progress in getting the model moved to the lobby of Building 32. He also said that the case will be remade so that it can be taken apart and to fix a crack, and in about a month they can move the model to the new location.

2.5 Land

Wolfe reported two improvements in resolution and in bright spots for the NDVI product. Resolution was increased, and bright spots were much reduced. He said that they aren't sure of the source of the spots.

Vermote reported on the recent radiation variables workshop in Boston, and said that those who attended received it very well. The problem was that most of the people there were in some way affiliated with the Science Team, and overall attendance wasn't very high. Vermote suggested that they might get better attendance if they tie the workshop to IGARSS or some similar meeting. However, he felt that it was still a useful activity, everything went well, and they're well prepared for next time. Esaias expressed interest in discussing this more for the Oceans workshops.

2.6 Oceans

Esaias reported that the group got a lot of good feedback at the workshop on October 26th. Mark Abbott's group is planning a session in the March 2003 timeframe, and the Ocean color meeting has slipped to May 2003. As for code release, Esaias said he talked to Brian Geurtz of the Goddard Patent Counsel, who is indicating that good progress is being made, and everyone has sent in their release forms. Esaias reported receiving inquiries from an investigator in South Africa who is looking for near real time access to data, and Justice said that a station is being worked on near Pretoria.

3.0 Action Items

3.1 New Action Items

None.

3.2 Old Action Items

3.2.1 Science Team to update the Terra Data Products Handbook and submit edits and new gray scale imagery to Barbara Conboy within a few weeks.
Status: Open.

MODIS has submitted all initial updates for the revised Terra Data Products Handbook. One final review with revisions incorporated may be requested for some products before the document goes to print. The handbook is expected to go to print in November.

3.2.2 Johnston to take a lead on developing a plan/process for the DAAC getting backup data from SDST.

Status: Closed.

A meeting was held on 10/4/02 on the subject of data recovery when archive tapes are found to be bad. Procedures that are currently in place were written down with some additional items added based on experience. An e-mail (10/8/02) summarizing the meeting was sent to all those on the PIP distribution list.